PURPOSE OF APPLICATION
Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK

The attached application requests the modification of the KJNP-FM license to reflect the recent replacement of the licensed KJNP-FM main antenna. The new KJNP-FM antenna is a Jampro JHPC-5-RFR-.9-R five bay 0.9 wavelength spaced circularly polarized nondirectional antenna that is mounted with its center of radiation located 34 meters above ground, the same height as the previously licensed KJNP-FM antenna, on a new 41 meter tower which was erected to replace the old KJNP-FM tower, which was dismantled.

Section 73.1692 of the FCC Rules requires a showing documenting that the antenna replacement has not had an adverse impact on the operation of nearby AM broadcast stations. There are no AM broadcast stations located within 3.2 kilometers of the KJNP-FM transmitter site. Thus, it is not necessary to provide any additional information documenting compliance with this rule section as part of the attached application.

The modified KJNP-FM facilities fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. These modified facilities operate with a nondirectional effective radiated power of 25 kilowatts. There are a number of other RF sources located on separate towers that are situated within 315 meters of the KJNP-FM tower at the Ester Dome transmitter site. These facilities include:

| | | |
|---|---|---|
| KUAC(FM) | Fairbanks, AK | Channel 210C |
| KYSC(FM) | Fairbanks, AK | Channel 245C1 |
| KJNP-TV | North Pole, AK | Channel 4 |

Additionally, there are also numerous Low Power TV stations operating on Channels 14 through 68 which are combined into two identical Scala 770-256 panel antennas mounted at the 15 meter and 31 levels on the KJNP-TV tower.

Following the installation of the KJNP-FM antenna, a fence was erected around the perimeter of the Ester Dome transmitter site to restrict general public access to all areas where the total power density levels could exceed the permitted level for uncontrolled exposure to nonionizing radiation. Figure 1.0 depicts the placement of this fence in relation to the towers that support the antennas located at this site.

KJNP-TV operates on TV Channel 4 with a peak visual effective radiated power of 19.1 kilowatts and an aural effective radiated power of 1.91 kilowatts using a Dielectric TAB-4L omnidirectional antenna with its center of radiation 36 meters above ground level. Table 1.1 and Figure 1.1 present the vertical radiation pattern for this antenna. Equation (2), found on Page 30 to Supplement A to FCC OET Bulletin No. 65, details the calculation technique for determine the power density levels for a TV broadcast facility. Utilizing this vertical radiation pattern data in conjunction with this equation yields a predicted maximum power density at two meters above ground level outside this fenced area of 4.12 $\mu W/cm^2$. Since the permitted power density for uncontrolled exposure on Channel 4 is 200 $\mu W/cm^2$, this amounts to only 2.06% of the permitted level for uncontrolled exposure. Since this value is also less than 5% of the permitted level, KJNP-TV is excluded from environmental processing under this standard and need not be considered in conjunction with other co-located or nearby facilities in evaluating uncontrolled exposure compliance with this standard outside this fence.

Since the low power TV stations that occupy this site are all combined into one of two identical Scala 770-256 panel antennas that are mounted on the KJNP-TV tower, as described above, the prediction of the power density levels at two meters above ground level for these LPTV facilities assumed the highest value of effective radiated

power (30 kilowatts) at each antenna height. Twelve of these stations utilize the lower antenna and thirteen of these stations utilize the higher antenna. Table 1.2 and Figure 1.2 present the vertical radiation pattern for this antenna, which was supplied by the manufacturer.

Using this vertical radiation data and an antenna height of 15 meters above ground level for the lower antenna in conjunction Equation (2) yields a worst case predicted power density of 1.34 $\mu W/cm^2$ at two meters above ground level outside the fenced area for each of the stations utilizing this lower antenna. Channel 14 is the lowest channel occupied by any of the twelve stations using this lower antenna and, as a result, has the lowest permitted power density limit (313.3 $\mu W/cm^2$) for uncontrolled exposure. Thus, the predicted power density outside the fenced area for each of these twelve low power TV stations is 0.43%, or less, of the permitted level for uncontrolled exposure. Since this is less than 5% of the permitted level, all twelve of these LPTV stations are excluded from environmental processing and need not be included in determining the total power density in the vicinity of this site.

For the antenna located at a height of 31 meters above ground level, these calculations yield a worst case predicted power density of 3.04 $\mu W/cm^2$ at two meters above ground level outside the fenced area for each of the stations utilizing this upper antenna. Channel 32 is the lowest channel occupied by any of the thirteen stations using this upper antenna and, as a result, has the lowest permitted power density limit (385.3 $\mu W/cm^2$) for uncontrolled exposure. Thus, the predicted power density outside the fenced area for each of these thirteen low power TV stations is 0.79%, or less, of the permitted level for uncontrolled exposure. Since this is less than 5% of the permitted

level, all thirteen of these LPTV stations are also excluded from environmental processing and need not be included in determining the total power density in the vicinity of this site.

The predicted power density levels at two meters above ground level for KUAC, KYSC, and the modified KJNP-FM facilities were calculated using the FCC's "FM Model" computer program. Figures 1.3 through 1.5 present the results of the calculations for these three stations. Based on Figure 1.3, the highest power density predicted for KUAC outside this fenced area at two meters above ground level is 73.1 $\mu W/cm^2$. Since the permitted power density for uncontrolled exposure in the FM band is 200 $\mu W/cm^2$, this amounts to 36.6% of the uncontrolled exposure limit. Based on Figure 1.4, the maximum predicted power density outside this fenced area at two meters above ground level for KYSC is 42.1 $\mu W/cm^2$, or 21.1% of the permitted level for uncontrolled exposure. Finally, Figure 1.5 shows that the maximum predicted power density outside this fenced area at two meters above ground level for the modified KJNP-FM facilities is 45.7 $\mu W/cm^2$ or 22.9% of the permitted level for uncontrolled exposure.

Summing the predicted power densities from all three of these FM stations yields a worst case predicted total predicted power density of 80.6% of the permitted level for uncontrolled exposure outside this fence.[1] Based upon this information, the modified KJNP-FM facilities, in conjunction with the other nearby facilities, do not result in total power density levels outside this fenced area that are in excess of the permitted level for uncontrolled exposure to nonionizing radiation.

[1]Even if KJNP-TV and the 25 LPTV stations cannot be considered as excluded RF sources, their inclusion in the calculation of the total power density levels only increases the worst case predicted power density level outside the fenced area to 98.2% of the permitted level for uncontrolled exposure. Thus, it is obvious that all areas outside the fenced area at this site will fully comply with the general public exposure limits, even when these other RF sources are included in the analysis.

KJNP-FM, in conjunction with the other facilities that occupy this site, will continue to take appropriate steps to insure that workers that must be inside the fenced area will not be exposed to levels of nonionizing radiation that are in excess of the permitted level for controlled exposure. These steps will include the cessation of operation or a reduction in power by one or more of these facilities, as appropriate, when work becomes necessary at any location within this fenced area where the total power density levels are in excess of the permitted level for controlled exposure.

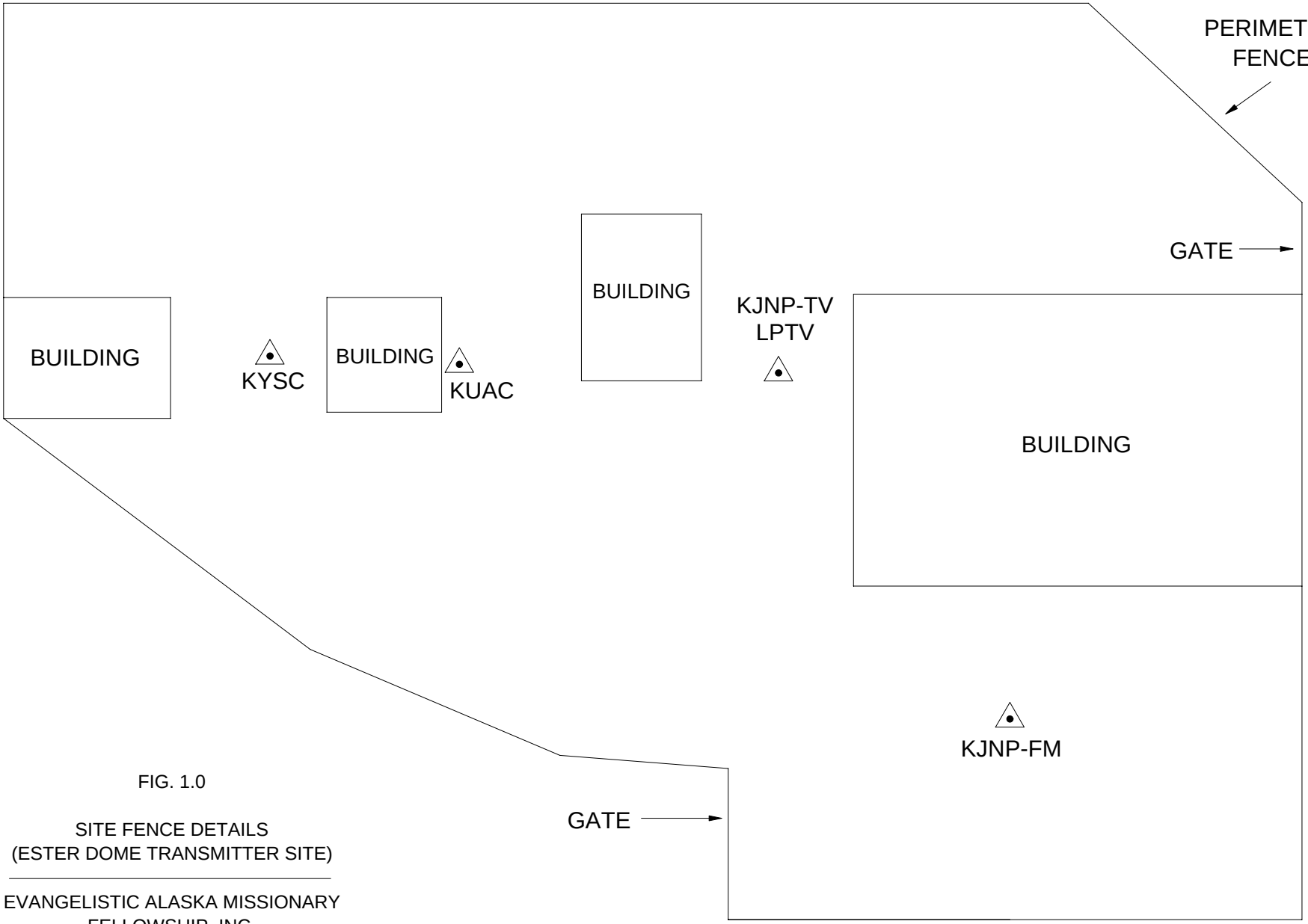



FIG. 1.0

SITE FENCE DETAILS
(ESTER DOME TRANSMITTER SITE)

EVANGELISTIC ALASKA MISSIONARY
FELLOWSHIP, INC.
NORTH POLE, AK

CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
(330) 659-4440

Dielectric

| | | | |
|---|---|---|---|
| Proposal Number | | Revision | |
| Date | 22 Feb 2006 | | |
| Call Letters | KJNP-TV | Channel | 4 |
| Location | North Pole, AK | | |
| Customer | | | |
| Antenna Type | TAB-4L | | |

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # TAB-4L-90

| Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field |
|---|---|---|---|---|---|---|---|---|---|---|---|
| -10.0 | 0.413 | 2.4 | 0.956 | 10.6 | 0.359 | 30.5 | 0.024 | 51.0 | 0.021 | 71.5 | 0.132 |
| -9.5 | 0.458 | 2.6 | 0.949 | 10.8 | 0.342 | 31.0 | 0.009 | 51.5 | 0.021 | 72.0 | 0.132 |
| -9.0 | 0.502 | 2.8 | 0.941 | 11.0 | 0.324 | 31.5 | 0.006 | 52.0 | 0.023 | 72.5 | 0.132 |
| -8.5 | 0.546 | 3.0 | 0.933 | 11.5 | 0.281 | 32.0 | 0.020 | 52.5 | 0.027 | 73.0 | 0.133 |
| -8.0 | 0.590 | 3.2 | 0.924 | 12.0 | 0.238 | 32.5 | 0.033 | 53.0 | 0.032 | 73.5 | 0.133 |
| -7.5 | 0.633 | 3.4 | 0.915 | 12.5 | 0.198 | 33.0 | 0.046 | 53.5 | 0.038 | 74.0 | 0.133 |
| -7.0 | 0.675 | 3.6 | 0.906 | 13.0 | 0.159 | 33.5 | 0.058 | 54.0 | 0.044 | 74.5 | 0.132 |
| -6.5 | 0.715 | 3.8 | 0.896 | 13.5 | 0.123 | 34.0 | 0.069 | 54.5 | 0.050 | 75.0 | 0.132 |
| -6.0 | 0.754 | 4.0 | 0.885 | 14.0 | 0.091 | 34.5 | 0.080 | 55.0 | 0.056 | 75.5 | 0.132 |
| -5.5 | 0.791 | 4.2 | 0.874 | 14.5 | 0.066 | 35.0 | 0.089 | 55.5 | 0.062 | 76.0 | 0.132 |
| -5.0 | 0.826 | 4.4 | 0.863 | 15.0 | 0.056 | 35.5 | 0.098 | 56.0 | 0.068 | 76.5 | 0.131 |
| -4.5 | 0.857 | 4.6 | 0.851 | 15.5 | 0.063 | 36.0 | 0.106 | 56.5 | 0.073 | 77.0 | 0.131 |
| -4.0 | 0.885 | 4.8 | 0.839 | 16.0 | 0.081 | 36.5 | 0.113 | 57.0 | 0.078 | 77.5 | 0.130 |
| -3.5 | 0.910 | 5.0 | 0.826 | 16.5 | 0.102 | 37.0 | 0.119 | 57.5 | 0.083 | 78.0 | 0.129 |
| -3.0 | 0.933 | 5.2 | 0.813 | 17.0 | 0.123 | 37.5 | 0.124 | 58.0 | 0.087 | 78.5 | 0.129 |
| -2.8 | 0.941 | 5.4 | 0.798 | 17.5 | 0.143 | 38.0 | 0.127 | 58.5 | 0.092 | 79.0 | 0.128 |
| -2.6 | 0.949 | 5.6 | 0.784 | 18.0 | 0.160 | 38.5 | 0.130 | 59.0 | 0.095 | 79.5 | 0.127 |
| -2.4 | 0.956 | 5.8 | 0.769 | 18.5 | 0.176 | 39.0 | 0.132 | 59.5 | 0.099 | 80.0 | 0.126 |
| -2.2 | 0.962 | 6.0 | 0.754 | 19.0 | 0.189 | 39.5 | 0.134 | 60.0 | 0.102 | 80.5 | 0.125 |
| -2.0 | 0.969 | 6.2 | 0.739 | 19.5 | 0.200 | 40.0 | 0.134 | 60.5 | 0.106 | 81.0 | 0.124 |
| -1.8 | 0.974 | 6.4 | 0.723 | 20.0 | 0.208 | 40.5 | 0.134 | 61.0 | 0.109 | 81.5 | 0.123 |
| -1.6 | 0.979 | 6.6 | 0.707 | 20.5 | 0.215 | 41.0 | 0.132 | 61.5 | 0.113 | 82.0 | 0.122 |
| -1.4 | 0.984 | 6.8 | 0.691 | 21.0 | 0.219 | 41.5 | 0.130 | 62.0 | 0.115 | 82.5 | 0.121 |
| -1.2 | 0.988 | 7.0 | 0.675 | 21.5 | 0.220 | 42.0 | 0.128 | 62.5 | 0.118 | 83.0 | 0.120 |
| -1.0 | 0.991 | 7.2 | 0.658 | 22.0 | 0.220 | 42.5 | 0.124 | 63.0 | 0.121 | 83.5 | 0.119 |
| -0.8 | 0.994 | 7.4 | 0.641 | 22.5 | 0.218 | 43.0 | 0.120 | 63.5 | 0.123 | 84.0 | 0.117 |
| -0.6 | 0.996 | 7.6 | 0.624 | 23.0 | 0.214 | 43.5 | 0.116 | 64.0 | 0.125 | 84.5 | 0.116 |
| -0.4 | 0.998 | 7.8 | 0.607 | 23.5 | 0.208 | 44.0 | 0.111 | 64.5 | 0.126 | 85.0 | 0.115 |
| -0.2 | 0.999 | 8.0 | 0.590 | 24.0 | 0.201 | 44.5 | 0.105 | 65.0 | 0.128 | 85.5 | 0.114 |
| 0.0 | 1.000 | 8.2 | 0.573 | 24.5 | 0.192 | 45.0 | 0.099 | 65.5 | 0.129 | 86.0 | 0.112 |
| 0.2 | 0.999 | 8.4 | 0.555 | 25.0 | 0.181 | 45.5 | 0.093 | 66.0 | 0.130 | 86.5 | 0.111 |
| 0.4 | 0.998 | 8.6 | 0.538 | 25.5 | 0.170 | 46.0 | 0.086 | 66.5 | 0.131 | 87.0 | 0.110 |
| 0.6 | 0.996 | 8.8 | 0.520 | 26.0 | 0.158 | 46.5 | 0.079 | 67.0 | 0.131 | 87.5 | 0.108 |
| 0.8 | 0.994 | 9.0 | 0.502 | 26.5 | 0.144 | 47.0 | 0.071 | 67.5 | 0.132 | 88.0 | 0.107 |
| 1.0 | 0.991 | 9.2 | 0.484 | 27.0 | 0.131 | 47.5 | 0.064 | 68.0 | 0.132 | 88.5 | 0.106 |
| 1.2 | 0.988 | 9.4 | 0.467 | 27.5 | 0.116 | 48.0 | 0.057 | 68.5 | 0.131 | 89.0 | 0.104 |
| 1.4 | 0.984 | 9.6 | 0.449 | 28.0 | 0.101 | 48.5 | 0.049 | 69.0 | 0.131 | 89.5 | 0.103 |
| 1.6 | 0.979 | 9.8 | 0.431 | 28.5 | 0.086 | 49.0 | 0.042 | 69.5 | 0.131 | 90.0 | 0.101 |
| 1.8 | 0.974 | 10.0 | 0.413 | 29.0 | 0.070 | 49.5 | 0.035 | 70.0 | 0.130 | | |
| 2.0 | 0.969 | 10.2 | 0.395 | 29.5 | 0.055 | 50.0 | 0.029 | 70.5 | 0.131 | | |
| 2.2 | 0.962 | 10.4 | 0.377 | 30.0 | 0.039 | 50.5 | 0.024 | 71.0 | 0.131 | | |

TABLE 1.1

KJNP-TV VERTICAL RADIATION PATTERN

Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK

Remarks:

Dielectric

| | | | |
|---|---|---|---|
| Proposal Number | | Revision | |
| Date | 22 Feb 2006 | | |
| Call Letters | KJNP-TV | Channel | 4 |
| Location | North Pole, AK | | |
| Customer | | | |
| Antenna Type | TAB-4L | | |

## ELEVATION PATTERN

| | | | |
|---|---|---|---|
| RMS Gain at Main Lobe | 4.0 (6.02 dB) | Beam Tilt | 0.00 Degrees |
| RMS Gain at Horizontal | 4.0 (6.02 dB) | Frequency | 69.00 MHz |
| Calculated / Measured | Calculated | Drawing # | TAB-4L-90 |

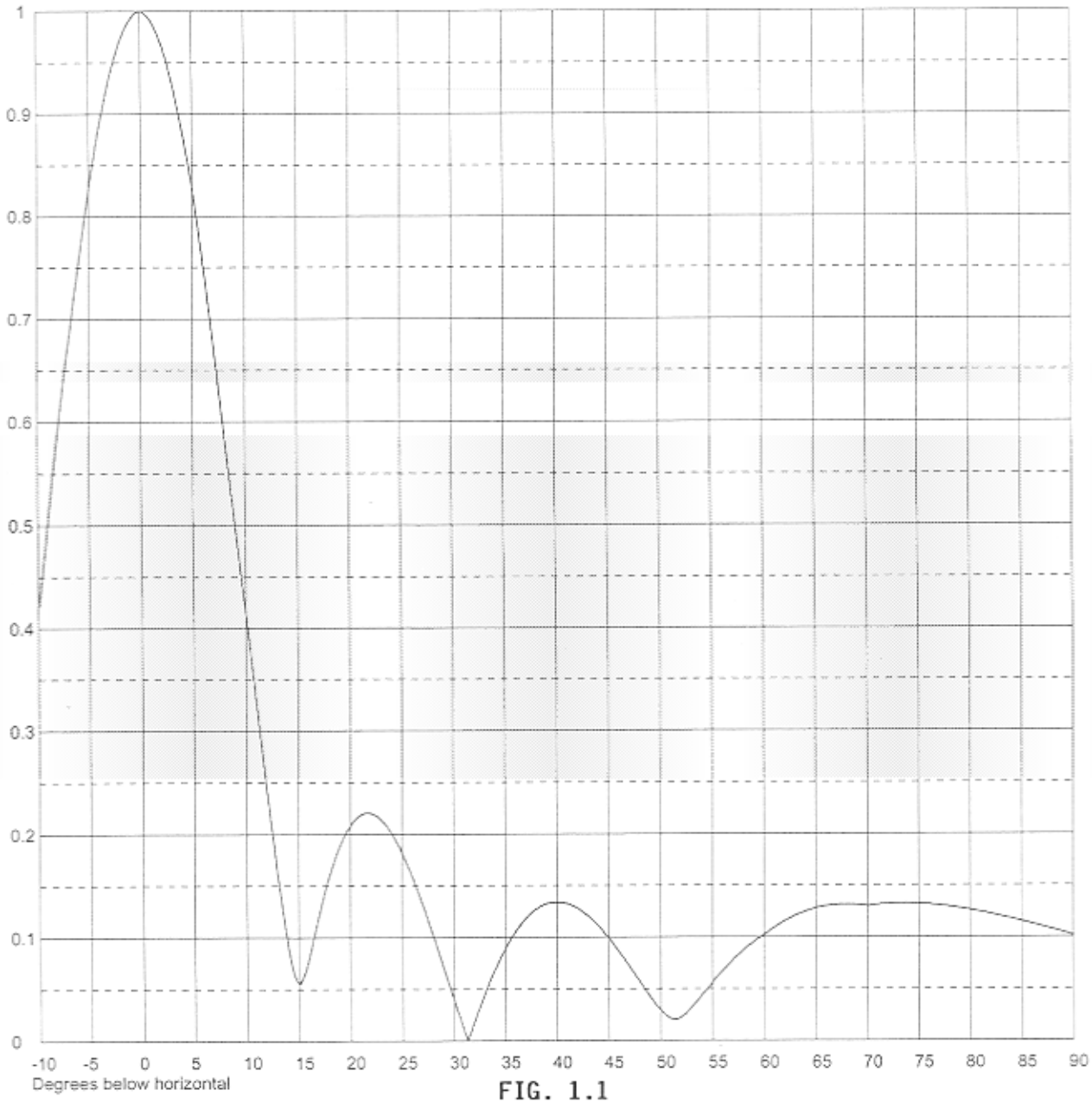



FIG. 1.1

Remarks:

KJNP-TV VERTICAL RADIATION PATTERN

Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK

FREQUENCY : 625.0 MHZ

AZIMUTH ANGLE FOR VRP : .0

| ELEVATION (°) | RELATIVE FIELD (%) | (dB) |
|---|---|---|
| 90. | .8 | -42.4 |
| 89. | .8 | -42.4 |
| 88. | .8 | -42.4 |
| 87. | .8 | -42.3 |
| 86. | .8 | -42.1 |
| 85. | .8 | -42.2 |
| 84. | .8 | -42.0 |
| 83. | .8 | -42.1 |
| 82. | .8 | -42.2 |
| 81. | .7 | -42.7 |
| 80. | .7 | -43.4 |
| 79. | .6 | -45.2 |
| 78. | .4 | -47.1 |
| 77. | .3 | -50.6 |
| 76. | .2 | -53.7 |
| 75. | .2 | -52.6 |
| 74. | .4 | -48.0 |
| 73. | .6 | -44.3 |
| 72. | .8 | -41.6 |
| 71. | 1.0 | -39.8 |
| 70. | 1.2 | -38.6 |
| 69. | 1.2 | -38.5 |
| 68. | 1.0 | -39.8 |
| 67. | .6 | -43.8 |
| 66. | .5 | -46.7 |
| 65. | 1.4 | -36.8 |
| 64. | 2.8 | -31.0 |
| 63. | 4.4 | -27.1 |
| 62. | 6.1 | -24.3 |
| 61. | 7.7 | -22.2 |
| 60. | 9.1 | -20.9 |
| 59. | 10.3 | -19.8 |
| 58. | 10.6 | -19.5 |
| 57. | 9.7 | -20.2 |
| 56. | 7.6 | -22.4 |
| 55. | 4.5 | -26.8 |
| 54. | 1.4 | -37.2 |
| 53. | 2.2 | -33.1 |

TABLE 1.2

SCALA 770-256 VERTICAL
RADIATION PATTERN

Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK

| | | |
|---|---|---|
| 52. | 3.8 | -28.5 |
| 51. | 3.9 | -28.1 |
| 50. | 2.7 | -31.3 |
| 49. | 1.0 | -40.2 |
| 48. | 1.8 | -34.8 |
| 47. | 3.0 | -30.5 |
| 46. | 2.9 | -30.7 |
| 45. | 1.5 | -36.5 |
| 44. | .7 | -42.5 |
| 43. | 2.2 | -33.1 |
| 42. | 2.6 | -31.6 |
| 41. | 1.8 | -35.1 |
| 40. | .0 | -76.1 |
| 39. | 1.6 | -36.0 |
| 38. | 2.3 | -32.7 |
| 37. | 1.7 | -35.4 |
| 36. | .4 | -48.5 |
| 35. | 1.5 | -36.3 |
| 34. | 2.0 | -33.9 |
| 33. | 1.3 | -37.8 |
| 32. | .6 | -44.6 |
| 31. | 1.7 | -35.4 |
| 30. | 1.8 | -34.7 |
| 29. | .7 | -42.9 |
| 28. | 1.1 | -39.1 |
| 27. | 2.5 | -32.0 |
| 26. | 3.8 | -28.4 |
| 25. | 5.2 | -25.7 |
| 24. | 7.6 | -22.4 |
| 23. | 6.7 | -23.4 |
| 22. | 2.2 | -33.0 |
| 21. | 4.4 | -27.1 |
| 20. | 7.0 | -23.1 |
| 19. | 4.2 | -27.6 |
| 18. | 3.5 | -29.2 |
| 17. | 7.6 | -22.4 |
| 16. | 5.8 | -24.8 |
| 15. | 2.0 | -33.9 |
| 14. | 8.1 | -21.9 |
| 13. | 8.0 | -21.9 |
| 12. | .8 | -41.8 |
| 11. | 7.9 | -22.0 |
| 10. | 10.5 | -19.5 |
| 9. | 3.9 | -28.2 |
| 8. | 8.2 | -21.8 |
| 7. | 14.0 | -17.1 |
| 6. | 7.9 | -22.1 |
| 5. | 10.5 | -19.6 |

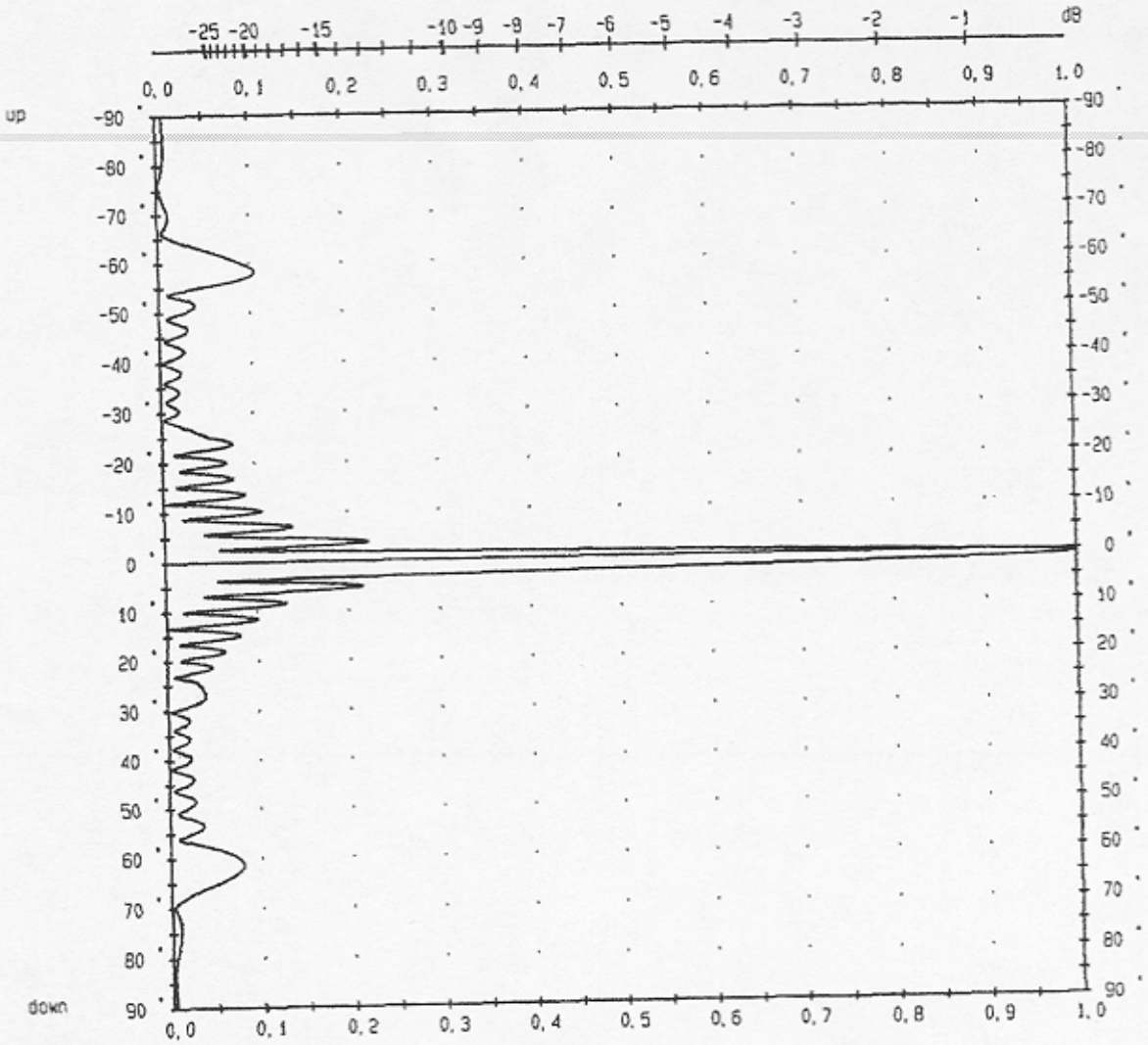
TABLE 1.2 (Cont'd)

| | | |
|---|---|---|
| 4. | 22.0 | -13.1 |
| 3. | 15.3 | -16.3 |
| 2. | 18.1 | -14.8 |
| 1. | 60.8 | -4.3 |
| 0. | 94.7 | -.5 |
| -1. | 100.0 | .0 |
| -2. | 74.0 | -2.6 |
| -3. | 32.0 | -9.9 |
| -4. | 7.8 | -22.1 |
| -5. | 21.7 | -13.3 |
| -6. | 15.4 | -16.3 |
| -7. | 4.4 | -27.0 |
| -8. | 12.7 | -17.9 |
| -9. | 10.9 | -19.3 |
| -10. | 2.0 | -33.9 |
| -11. | 8.6 | -21.3 |
| -12. | 9.3 | -20.6 |
| -13. | 2.5 | -32.2 |
| -14. | 5.4 | -25.4 |
| -15. | 8.2 | -21.8 |
| -16. | 4.2 | -27.5 |
| -17. | 3.0 | -30.4 |
| -18. | 6.4 | -23.9 |
| -19. | 4.6 | -26.7 |
| -20. | 1.7 | -35.3 |
| -21. | 4.7 | -26.5 |
| -22. | 4.3 | -27.4 |
| -23. | 1.1 | -39.5 |
| -24. | 2.7 | -31.5 |
| -25. | 3.5 | -29.2 |
| -26. | 4.0 | -28.0 |
| -27. | 4.2 | -27.5 |
| -28. | 4.0 | -28.1 |
| -29. | 2.7 | -31.3 |
| -30. | .7 | -43.3 |
| -31. | 1.7 | -35.4 |
| -32. | 2.4 | -32.5 |
| -33. | 1.6 | -36.1 |
| -34. | .7 | -43.2 |
| -35. | 1.9 | -34.3 |
| -36. | 2.3 | -32.9 |
| -37. | 1.2 | -38.2 |
| -38. | .7 | -43.0 |
| -39. | 2.1 | -33.4 |
| -40. | 2.5 | -32.2 |
| -41. | 1.4 | -37.2 |
| -42. | .4 | -47.9 |
| -43. | 2.1 | -33.5 |

TABLE 1.2 (Cont'd)

| | | |
|---|---|---|
| -44. | 2.8 | -31.2 |
| -45. | 2.1 | -33.4 |
| -46. | .7 | -43.6 |
| -47. | 1.6 | -36.2 |
| -48. | 2.8 | -31.2 |
| -49. | 2.9 | -30.8 |
| -50. | 1.9 | -34.5 |
| -51. | .8 | -41.6 |
| -52. | 2.3 | -32.8 |
| -53. | 3.5 | -29.1 |
| -54. | 3.6 | -28.8 |
| -55. | 2.6 | -31.7 |
| -56. | .9 | -40.8 |
| -57. | 2.5 | -32.1 |
| -58. | 4.8 | -26.4 |
| -59. | 6.6 | -23.7 |
| -60. | 7.5 | -22.4 |
| -61. | 8.1 | -21.8 |
| -62. | 8.1 | -21.8 |
| -63. | 7.6 | -22.4 |
| -64. | 6.7 | -23.5 |
| -65. | 5.5 | -25.2 |
| -66. | 4.1 | -27.8 |
| -67. | 2.7 | -31.2 |
| -68. | 1.6 | -35.8 |
| -69. | .7 | -42.6 |
| -70. | .3 | -50.5 |
| -71. | .6 | -45.1 |
| -72. | .8 | -42.0 |
| -73. | .9 | -40.7 |
| -74. | .9 | -40.5 |
| -75. | .9 | -40.7 |
| -76. | .9 | -41.0 |
| -77. | .8 | -41.6 |
| -78. | .7 | -42.6 |
| -79. | .6 | -44.1 |
| -80. | .5 | -45.8 |
| -81. | .4 | -48.2 |
| -82. | .3 | -51.0 |
| -83. | .2 | -52.1 |
| -84. | .2 | -52.2 |
| -85. | .3 | -51.6 |
| -86. | .3 | -50.0 |
| -87. | .3 | -49.3 |
| -88. | .4 | -48.6 |
| -89. | .4 | -48.4 |
| -90. | .4 | -48.2 |

**TABLE 1.2 (Cont'd)**




frequency in MHz 625.000
azimut in ° .0
omni-dir in dBd 13.36

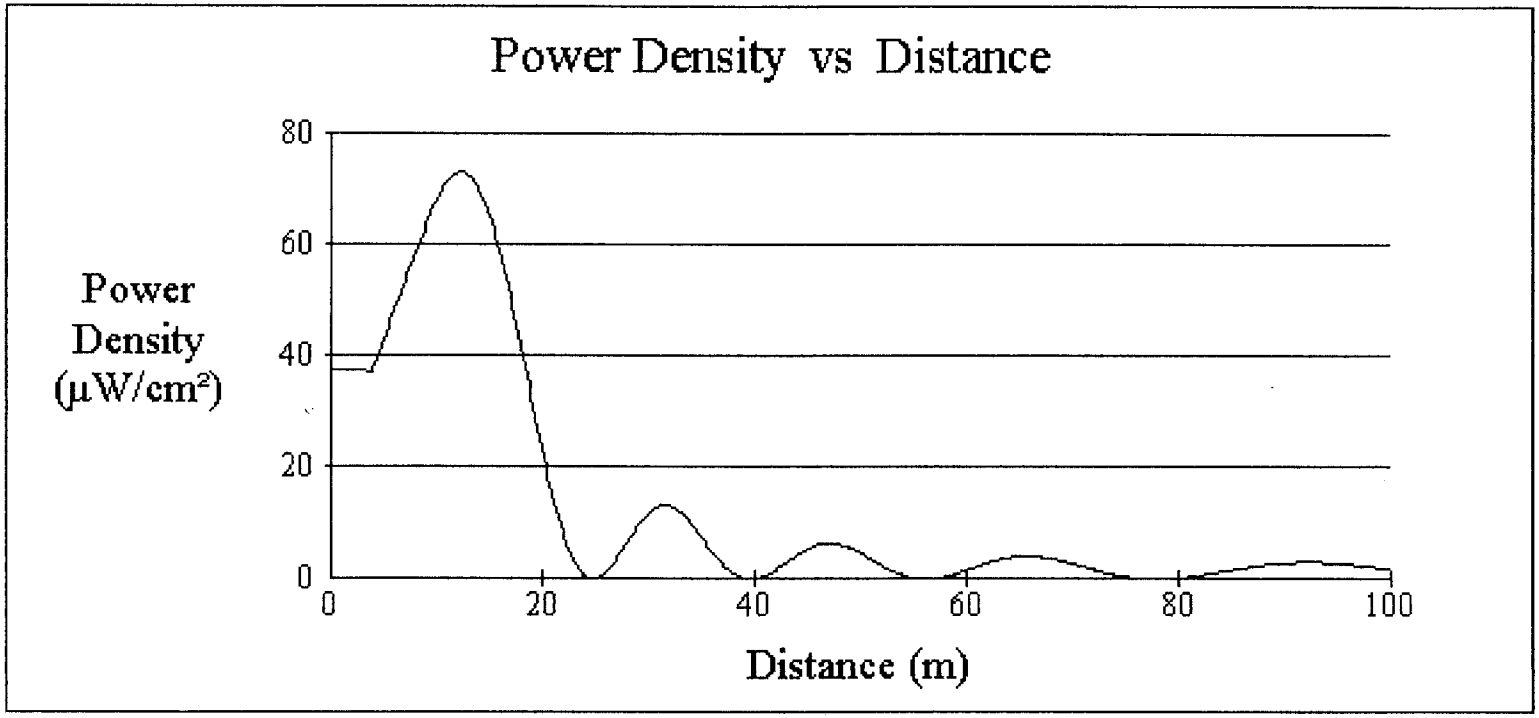
FIG. 1.2

SCALA 770-256 VERTICAL
RADIATION PATTERN

Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK

Kathrein UHF-TV Transmitting Antenna Fairbanks, AK 770 256

| | | |
|---|---|---|
| S C A L A<br>Medford Oregon | Patterns generated at Mid Band | Typ Nr. |
| mj 13.12.** 11:22 | | Bl.: |




Office of Engineering and Technology

Distance (m): 100

Antenna Type: ERI or JAMPRO JBCP "Rototiller" (EPA)

Horizontal ERP (W): 38000

Vertical ERP (W): 38000

Antenna Height (m): 47

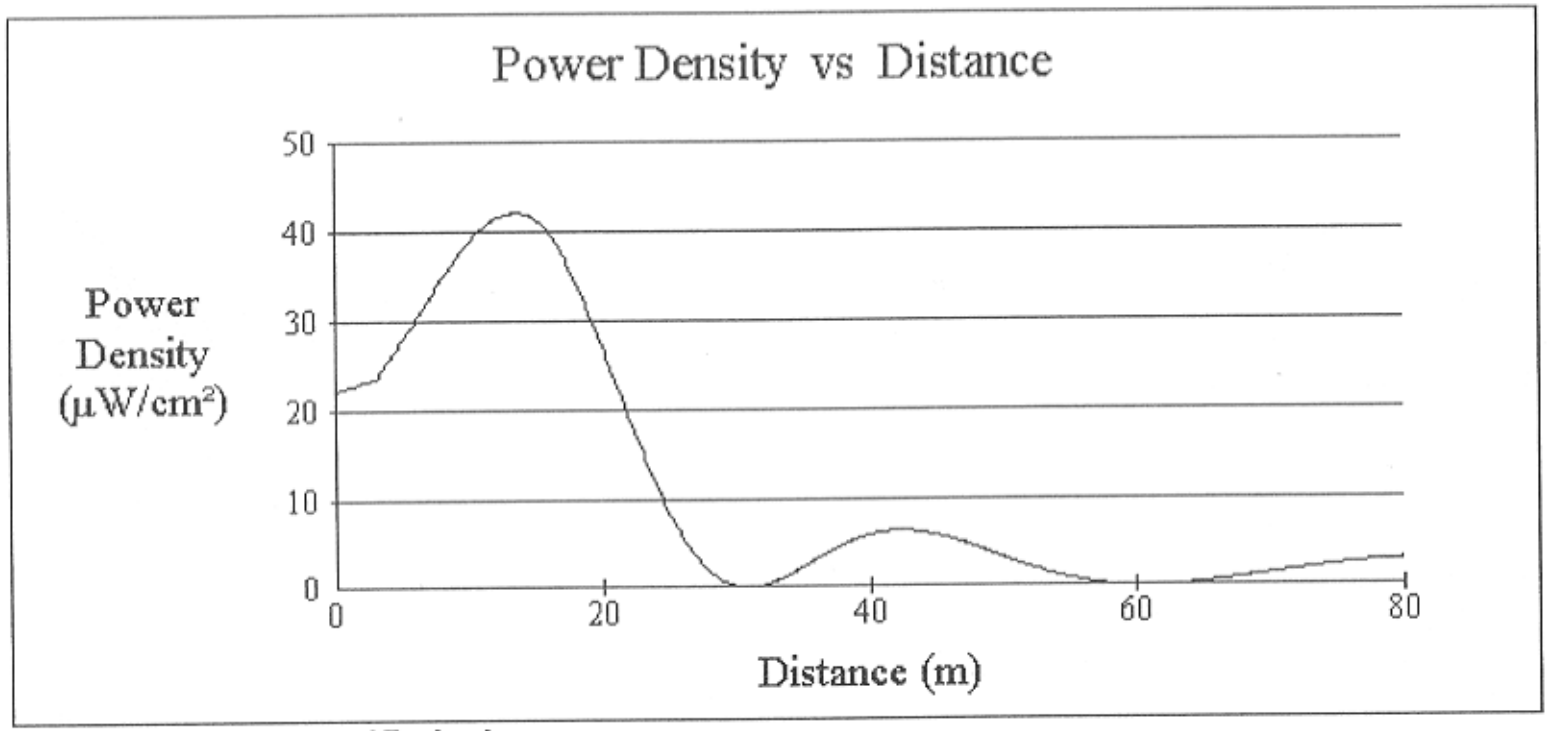
Number of Elements: 8

Element Spacing: 1

FIG. 1.3

KUAC POWER DENSITY CALCULATIONS

Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK



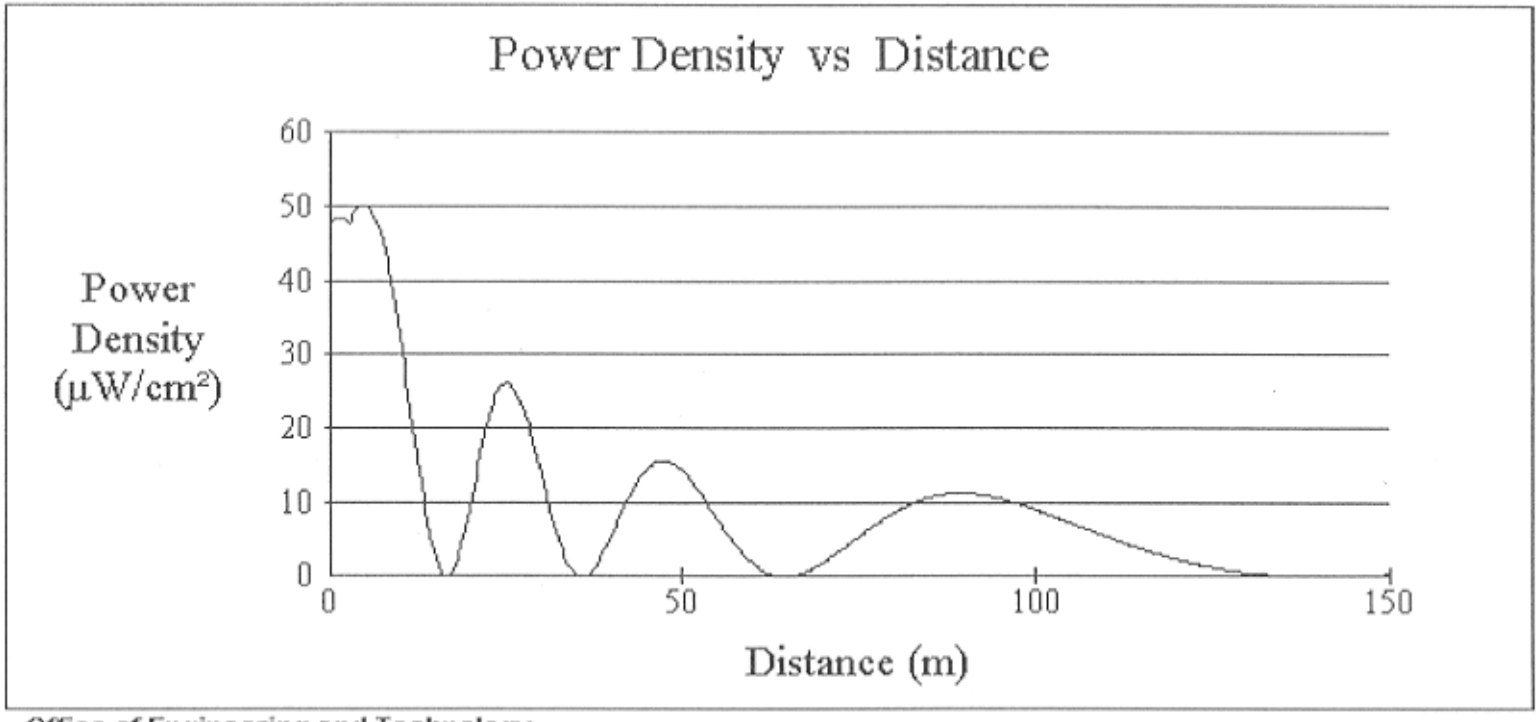

Office of Engineering and Technology

| | | | |
|---|---|---|---|
| Distance (m): | 80 | Antenna Type: | Jampro "Double V" (EPA) |
| Horizontal ERP (W): | 5800 | Number of Elements: | 4 |
| Vertical ERP (W): | 5800 | | |
| Antenna Height (m): | 37 | Element Spacing: | 1 |

FIG. 1.4

KYSC POWER DENSITY CALCULATIONS

Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK




Office of Engineering and Technology

Distance (m): 150

Antenna Type: Jampro "Double V" (EPA)

Horizontal ERP (W): 25000

Vertical ERP (W): 25000

Antenna Height (m): 34

Number of Elements: 5

Element Spacing: .9

FIG. 1.5

KJNP-FM POWER DENSITY CALCULATIONS

Evangelistic Alaska Missionary Fellowship, Inc.
North Pole, AK